

REMARKS/ARGUMENTS

This Amendment is being filed in response to the Office Action dated October 1, 2008. Reconsideration and allowance of the application in view of the amendments made above and the remarks to follow are respectfully requested.

Claims 1, 3-7, 9 and 11 are pending in the Application. Claims 2, 8, 10 and 12-13 are canceled without prejudice. Applicants reserve the right to pursue the withdrawn claims at a later time in this application, or in a continuation application, without prejudice.

In the Office Action, the specification is objected to under 35 U.S.C. §112, first paragraph, as allegedly being replete with terms that are not clear, concise and exact. In response to this objection, in the interest of cooperation, Applicants have submitted herewith a substitute specification in which various specification amendments are made to address the various issues raised by the Examiner on pages 2-5 of the Office Action regarding objections to the specification. For instance, Applicants have added section headings in the specification, where appropriate. In addition, reference numerals have been added in the specification,

where appropriate, to denote elements depicted in the accompanying FIGS. 1-6.

It appears that much of the confusion associated with the specification description was due to the inadvertent mislabeling of element layers 11 and 13 in FIGS. 1-6. As is readily evident from the specification description, the original labeling of the base layer 11 and active layer 13 in FIGS. 1-6 was incorrect, as the base layer and active layer in FIGS. 1-6 should have been labeled 13 and 11, respectively, for consistency with the specification description. This confusion has been remedied by amending FIGS. 1-6 to switch the reference labels 11 and 13 such that the base layer is denoted by label 13 and the active layer is denoted by label 11. Moreover, the specification has been amended to add a reference label 15 for the functional layer, which is schematically depicted (in generic form) in FIGS. 5 and 6 as being formed/disposed on a side of the insulating substrate layer 12 opposite the active layer 11. No new matter is added by the amendments to the specification. Applicants sincerely believe that the specification amendments have addressed the various issues and objections raised in the Office Action.

In the Office Action, the drawings are objected to for various reasons set forth on pages 5-7 of the Office Action. In response, new drawing sheets have been submitted including amended FIGs. 1-6. As noted above, FIGs. 1-6 are amended to add additional reference labels and to correct mislabeled elements. Moreover, new FIG. 7 that was submitted with Applicants' previous response has been deleted in its entirety, and FIG. 8 (also submitted with Applicants' previous response) has been re-labeled as "FIG. 7".

With regard to the claimed functional layer, it is respectfully asserted that FIGs. 5 and 6 are amended to include reference labels "15" which denote a functional layer that is depicted, in high-level generic form. The current specification discloses various exemplary embodiments for the functional layer 15, including capacitors, antennas and particularly electro-optical layers, etc. In this regard, it is respectfully asserted that the various claimed embodiments of the functional layers are indeed illustrated, although generically, in FIGs. 5 and 6, and such depiction is sufficient for one of ordinary skill in the art to understand the invention. It is respectfully submitted that it would be unduly burdensome and problematic to require Applicants to provide an entire set of new drawings depicting specific

embodiments and structures of the various functional layers/components. Further, it is respectfully submitted that the particular structure of functional components is not claimed and as such, need not be shown in the figures for an understanding of the presently claimed embodiments. Accordingly, Applicants respectfully request approval of the enclosed proposed new drawings and withdrawal of the drawing objection.

In the Office Action, FIG. 7 and the associated specification amendments (as previously presented) are objected to under 35 U.S.C. 132(a) as allegedly introducing "new matter". Although Applicants respectfully disagree with this objection, in the interest of cooperation, and in view of the specification and drawing amendments made herein, FIG. 7 and the associated specification description have been deleted in their entirety. Accordingly, withdrawal of the new matter objection is respectfully requested.

Claims 1 and 3-5 are rejected under 35 U.S.C. §102(b) over U.S. Patent Application Publication No. 2002/0050599 to Lee ("Lee"). Claims 1, 3-5, 7 and 9 are rejected under 35 U.S.C. §102(b) over U.S. Patent No. 6,750,924 to Murade ("Murade"), individually under 35 U.S.C. §102(b), and under 35 U.S.C. §103(a)

over Murade in view of Lee. Claim 6 is rejected under 35 U.S.C. §102(b) over Murade, and under 35 U.S.C. §103(a) over Murade and Lee further in view of US Patent No. 6,771,342 to Hirakata ((Hirakata)). Claim 11 is rejected under 35 U.S.C. §102(b) over Murade and/or Lee, and further rejected under 35 U.S.C. §103(a) as obvious over Murade and/or Lee further in view of WIPO document No. 02/073572 to E. Ink Corp. ("E. Ink Corp."). It is respectfully submitted that the claims are allowable over Lee alone, Murade, alone and in combination with Lee, and in further combination with Hirakata, and Murade and/or Lee in view of E Ink Corp., for at least the following reasons.

In formulating the rejection of claim 1, the Office Action relies on FIG. 4F of Lee as anticipating claim 1. FIGs. 4A-4F of Lee discloses a transistor formed on a buffer layer (113) disposed on a metallic substrate (111). The transistor includes a gate electrode (126), gate insulating layer (128), an active layer (155) formed over the gate electrode (126), and metallic drain/source electrodes (159) and (161). A passivation layer (165) is formed over one side of the substrate (111, 113) to cover the transistor device. A pixel electrode (171) is formed on top of the passivation layer (165) and makes contact to the drain electrode

(161) through a drain contact hole (167) formed through the passivation layer (165). (See paragraphs [0026] - [0030]).

In view of the above, Lee discloses nothing more than a transistor, passivation layer (165) and pixel electrode (171) all formed and stacked on one side of the substrate (111, 113). The passivation layer (165) cannot reasonably be construed as a "substrate layer" in the context of claim 1, as such layer (165) is formed over the substrate and merely serves as a passivation layer to protect and electrically isolate the transistor device from the upper layer components (e.g., pixel electrode). Lee does not disclose or suggest a substrate layer of insulating material having a active layer and a functional layer disposed on opposing first and second sides of the substrate, as substantially recited in claim 1.

Murade discloses in FIGs. 7A and 7B, a substrate (10) having a insulating film (40), a semiconductor layer (30), insulating interlayer films (41, 42, 43), and a pixel electrode (118) which is connected to a drain region 116D of a TFT (116) via a conductive interlayer (181), which components/layers are all formed on one side of the substrate (10). (See, Col. 14, line 14 - Col. 15, line 3.) In this regard, at the very least, similar to the deficiencies

of Lee, Murade does not disclose a substrate layer of insulating material having an active layer and functional layer disposed on opposing first and second sides of the substrate.

It is respectfully submitted that the device of claim 1 is not anticipated or made obvious by the teachings of Lee alone, Murade alone and in combination with Lee. For example, Lee alone, Murade alone and in combination with Lee does not disclose or suggest, a device that amongst other patentable elements, comprises (illustrative emphasis added) "a substrate layer of electrically insulating material having a first side and an opposed second side, which substrate layer is provided with a first aperture extending from the first to the second side; an active layer of a semiconductor material disposed on and in contact with the first side of the substrate layer, . . . and a functional layer disposed on the second side of the substrate layer and electrically connected to the first electrode [in the active layer] through the first aperture in the substrate layer" as recited in claim 1.

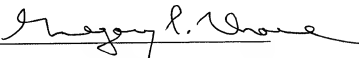
Based on the foregoing, the Applicants respectfully submit that independent claim 1 is patentable over Lee alone, Murade alone, and in combination with Lee and notice to this effect is earnestly solicited. Claims 3-7, 9 and 11 respectively depend from

claim 1 and accordingly are allowable for at least this reason as well as for the separately patentable elements contained in each of the claims. Accordingly, separate consideration of each of the dependent claims is respectfully requested.

In addition, Applicants deny any statement, position or averment of the Examiner that is not specifically addressed by the foregoing argument and response. Any rejections and/or points of argument not addressed would appear to be moot in view of the presented remarks. However, the Applicants reserve the right to submit further arguments in support of the above stated position, should that become necessary. No arguments are waived and none of the Examiner's statements are conceded.

Applicants have made a diligent and sincere effort to place this application in condition for immediate allowance and notice to this effect is earnestly solicited.

Respectfully submitted,

By 

Gregory L. Thorne, Reg. 39,398
Attorney for Applicant(s)
February 2, 2009

Enclosures: New drawing sheet (3 Replacement sheets including
FIGs. 1, 2, 3, 4, 5, 6 and 7)

Marked-Up version of Substitute Specification
Clean Version of Substitute Specification

THORNE & HALAJIAN, LLP
Applied Technology Center
111 West Main Street
Bay Shore, NY 11706
Tel: (631) 665-5139
Fax: (631) 665-5101